

THE MONOCHAMINI (Cerambycidae) OF THE ETHIOPIAN FAUNISTIC REGION. VI. THE SUBTRIBE DOCOHAMMIDI

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In addition to the Acridocephalids, another small group of Ethiopian monochamines, represented by two genera, proved to be discordant with the remaining members of the tribe. These two, *Docohammus* and *Docolamia*, agree in body form more closely with the typical representatives, having the elytral and pronotal dorsal surfaces on separate planes, but are quite diverse from these and the acridocephalids in the structure of the femora and tibiae as well as in the upper mouthparts.

Material for this final portion of this series of studies was received from the British Museum (Natural History) [BM]; the E. F. Gilmour collection [EFG]; and the Senckenberg Museum [SM]. The authors express their appreciation to Mr. J. Balfour-Browne, Mr. E. F. Gilmour, and Dr. Elli Franz for making their collections available to them.

Docohammidi Dillon and Dillon, new subtribe

Head relatively short; front meeting vertex at 90° angle or more; clypeo-frontal suture distinct, clypeus strongly produced over epistoma, concealing it, at apex bilobely emarginate. Pronotum and elytra not in the same plane. Legs short, successively longer posteriorly; femora constricted before apex, then reexpanded; mesotibiae and metatibiae not sulcate nor notched; tarsal claws fixed, divaricate.

Key to genera

Mesosternum simple; pronotal disk with five tubercles	Docohammus
Mesosternum with a distinct tubercle; pronotal disk with three tubercles	Docolamia

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²The various parts that compose this series have been, or are being, published as follows:

Part I. Subtribe Monochamidi. *Pseudhammus* and Allies. Reading Public Museum and Art Gallery, Scientific Publication No. 9, 1959.

Part II. Subtribe Monochamidi. Genera Related to *Monochamus*. British Museum (Natural History), Bulletin. Entomology, Vol. 8. 1959.

Part III. Subtribe Monochamidi. *Oxylamia* and Related Genera. Entomologische Arbeiten (Munich). Vol. 10, Part 3. 1959.

Part IV. Subtribe Monochamidi. *Melanopolia* and Allies. Annals of the Entomological Society of America, Vol. 52. 1959.

Part V. Subtribe Acridocephalidi. Coleopterists' Bulletin, Vol. XII. 1958.

Part VI. Subtribe Docohammidi. Coleopterists' Bulletin, Vol. XIII. 1959.

Docohammus Aurivillius

Docohammus Aurivillius, Deutsche Ent. Zeit. 1908, p. 217. Breuning, Nov. Ent. suppl. III (2) 1944, p. 389.

(Female). Moderate in size, elongate-oblong, subcylindrical. Head slightly shortened, vertex feebly declivous, deeply impressed between antennal tubercles; front distinctly taller than wide, sides subparallel, slightly constricted below eyes, lateral margins each with two setigerous punctures near eye; clypeus distinct, produced over epistoma entirely concealing it, bilobedly emarginate. transversely sulcate above process so as to be entirely distinct from front; eye with lower lobe broadly oblong, erect, at least two-thirds again as tall as gena, isthmus broad, slightly narrower than upper lobe, which is three-fifths as wide as interocular space; antennal tubercles very prominent, subapproximate basally, moderately divergent apically. Pronotum one-third again as broad across base as long, sides nearly parallel; lateral tubercles prominent, placed slightly before middle, armed with a robust spine; disk with five prominent tubercles, impunctate; apical and basal transverse sulci very distinct, the former narrowly recurved at middle. Elytra with basal gibbositities broad, not prominent; disk entirely foveately punctate, punctures at extreme base bearing granules, those on apical half finer; apices narrowly, submarginately truncate, angles unarmed; humeri simple. Prosternum simple, narrow between procoxae; mesosternal process rather broad, apex slightly covered by a process of the metasternum, not tuberculate anteriorly. Legs rather short, hind ones longest; femora robust, gradually clavate from base, feebly constricted before apex; protibiae slightly shorter than femora; mesotibiae and metatibiae not sulcate. Antennae as long as body in female, longer in male, robust, depressed, feebly fimbriate beneath nearly to apex; scape robust, biflexuose, distinctly thickened to apex, where it is suddenly expanded, especially so laterally, nearly attaining middle of pronotum, cicatrix extending about one-third around apical margin, broad, subtriangular; third segment one-sixth shorter than first, apex slightly expanded; fourth subequal to third; rest. including eleventh, gradually decreasing in length.

Genotype: *Docohammus bennigseni* Aurivillius, by monotypy.

Remarks: The very broad, subtriangular cicatrix, the elongate, bilobed clypeus, concealing the epistoma, the metasternum partially covering apex of mesosternal process, the lack of any sulcus on mesotibiae, and the antennal formula will distinguish this genus from all others.

Key to species

1. Third antennal segment longer than fourth; body length 20 mm. or more 2
 Third antennal segment no longer than fourth; body length no more than 12 mm
 **flavescens**
2. Lower ocular lobe twice genal height; elytra strongly transversely rugose, especially
 on basal gibbosity; femora not fuscous annulate apically **franzae**
 Lower ocular lobe two-thirds again as tall as gena; elytra at base foveately
 punctate; femora fuscous, annulate apically..... **bennigseni**

***Docohammus bennigseni* Aurivillius**

Docohammus Bennigseni Aurivillius, Deutsch. Ent. Zeit. 1908, p. 217, pl. 3, fig. 3. Breuning, Nov. Ent. suppl. III, (2) 1944, p. 389.

Female. Black, densely covered with medium brown pubescence. Head above broadly tinged with fulvous; front and genae irregularly variegated with ashy, the former margined each side with fulvous. Pronotum irregularly variegated with ashy and fulvous; disk each side of middle with a broad poorly defined, fuscous vittae. Scutellum sparsely ashy pubescent at extreme base. The elytra irregularly variegated with fulvous and hoary pubescence, the latter more or less condensed at apical third into a poorly indicated fascia, and with a number of fuscous maculae, of which there are three larger ones, one towards sides behind basal third and two near middle placed in an oblique row. Body beneath medially ashy pubescent; the abdomen brownish pubescent with a row of ashy maculae on sides. Legs brownish pubescent; femora near apex and tibiae near base indistinctly fuscous annulate; tarsi entirely ashy pubescent. Antennae fuscous pubescent; scape at apex narrowly, remaining segments with basal halves, fulvous-ashy annulate, as well as also extreme tip of eleventh.

Head with a few fine punctures near eye, vertex deeply impressed between antennal tubercles; front distinctly taller than wide, sides subparallel, slightly constricted below eyes, near each eye with two large, setigerous punctures; eye with lower lobe broadly oblong, erect, two-thirds again as tall as gena. Pronotum one-third again as broad across base as long, sides parallel; lateral tubercles prominent, placed slightly before middle, armed with an obtuse, robust spine; disk with five small, but strongly elevated tubercles, the three basal ones more or less contiguous, impunctate; apical and basal transverse sulci deeply impressed, the apical one narrowly recurved at middle. Elytra with basal gibbositities broad but poorly elevated; disk on basal half foveately punctate, the punctures at extreme base bearing fine granules, behind middle coarsely punctate to apex; apices submarginately truncate, the angles unarmed. Antennae about as long as body, robust, depressed, distinctly fimbriate beneath nearly to apex; scape robust, biflexuose, distinctly thickened to apex, where it is suddenly expanded, nearly attaining middle of pronotum; third segment one-sixth shorter than first; fourth subequal to third; rest gradually decreasing in length, including eleventh.

Length 21.5 mm.; width 7.0 mm.

Type locality: Mpuapua, German East Africa

Distribution: East Africa

Kenya: 1, Namanga River, Oct. 1950. (van Someren) [BM]

***Docohammus franzae* Dillon and Dillon, new species**

Male. Head and pronotum piceous, elytra dark reddish brown, covered with fine brownish gray pubescence. Head above with large, vague, ashy areas above on sides, and laterally on front. Pronotum medially with a similar large, vague, ashy area. Elytra behind middle with a broad, indistinct ashy fascia, the anterior margin somewhat oblique and preceded by an irregular fuscous marking. Body beneath largely sparsely ashy pubescent; abdominal sternites each with a small, poorly defined ashy macula on sides. Legs reddish brown, sparsely ashy pubescent. Antennae reddish brown, scape piceous; sparsely covered with fine ashy pubescence, which is feebly denser on basal halves of segments.

Head minutely alutaceous; front one-third higher than wide, parallel-sided, very slightly narrowed below eyes, laterally with several coarse punctures; eyes with lower lobe broadly oblong, erect, twice as tall as gena. Pronotum one-fourth wider at base than long, sides subparallel; lateral tubercles prominent, placed near middle, armed with a robust spine; basal and apical sulci shallow but distinct, latter slightly re-curved medially; disk with five tubercles, the median one broad, well-elevated, the anterior ones most prominent of all, but narrow, the lateral basal ones quite small. Elytra at extreme base with a number of coarse granulate-punctures, on basal gibbosit-ies and behind humeri toward sides rugosely punctate, the rugosities on gibbosity much stronger, disk thence to middle coarsely foveately punctate, behind middle punctures somewhat finer; apices feebly obliquely subtruncate. Antennae nearly one-half again as long as body, robust, depressed, beneath very sparsely fimbriate on first four segments; scape robust, biflexuose, distinctly clavate to apex, where it is suddenly expanded, nearly attaining middle of pronotum; third segment straight, slightly thick-ened at apex, one-sixth longer than scape; fourth feebly shorter than third, rest gradually diminishing in length, except eleventh which is a little longer than tenth.

Length 21.5 mm; width 7 mm.

Holotype: Male; Windhoek-Swakopmund, May, 1912. (F. Schmidt)
[SM].

Remarks: This species is somewhat similarly marked as *benningseni*, but here the pattern is much more indistinct, also the antennae are scarcely annulate and the elytra are strongly transversely rugose (or granulate), especially on basal gibbosity, and the femora are not fuscous annulate apically. Moreover, the lower lobe is somewhat longer, being twice as tall as the gena.

The authors take pleasure in naming this form for Dr. Elli Franz, who has made this species and other fine material of the Senckenberg Museum available for study.

Docohammus flavescens Breuning

Docohammus flavescens Breuning, Ann. Mus. Stor. Nat. Genoa, LVIII, 1938, p. 204; Nov. Ent. suppl. III (2) 1944, p. 389.

“Antennae as long as (δ) or distinctly shorter (♀) than body, the third segment as long as fourth, a little shorter than scape, eleventh segment tapering apically. Lower ocular lobes five times as long as gena. Front much higher than wide. Lateral spine of pronotum fine, acute; several fine punctures on sides of disk; scutellum quadrangular, rounded at apex. Elytra densely and finely punctate, finely granulate at base, the punctures very fine towards apex.

“Dark brown, covered with pale yellow pubescence. On elytra a vague gray transverse macula in common at the suture behind the scutellum and a similar slightly broader band a little before middle (usually indistinct). Tarsi and antennae covered with bright gray pubescence. Length 10.5-11 mm; width: 3-3.5 mm. Abyssinia: Diré-Daoua in Museum of Genoa” (A translation of the original description).

Docolamia Breuning

Docolamia Breuning, Nov. Ent. suppl. III (2) 1944, p. 389.

Moderate sized, elongate-oblong, subcylindrical. Head somewhat shortened, vertex distinctly declivous, rather feebly impressed between antennal tubercles; front subquadrate, sides parallel, not constricted below eyes; clypeus produced over epistoma and entirely concealing it, bilobedly emarginate, transversely sulcate above so as to be distinct from front; eye with lower lobe broadly oblong, not quite half again as tall as gena, isthmus broad, slightly narrower than upper lobe, which is three-fifths as broad as upper interocular space; antennal tubercles only slightly prominent, subapproximate basally, strongly divergent apically. Pronotum one-fourth wider across base than long, sides irregular, subparallel; lateral tubercles prominent, placed at middle, at apex with a robust tooth; disk with three prominent, subequal tubercles, at base either side of middle with a few small granules; apical and basal transverse sulci distinct, the former recurved medially. Elytra with basal gibbosity rather feebly elevated; preceded at base by a small group of prominent granules; disk granulate-punctate on basal fourth, thence simply, subfoveately punctate, punctures becoming finer apically; apices broadly, separately rounded or obliquely subtruncate; humeri simple. Prosternal process simple, narrow, of nearly equal width except at extreme base where it suddenly expands; mesosternal process broad anteriorly, tapering behind, anteriorly with a large, rounded tubercle. Legs rather short, hind ones longest, front ones very short; femora robust, gradually clavate from base, feebly constricted before apex; meso and metatibiae without any trace of a sulcus, with a dense patch of pubescence on outer margin; protarsi in male feebly expanded, all tarsal segments short. Antennae about one-third again as long as body in male, in female as long as body, rather sparsely fimbriate beneath to apex, robust, subdepressed; scape sinuate, robust, gradually clavate to apex, where it is feebly expanded, attaining apical third of pronotum, cicatrix extending about one-third around apical margin, broad, subtriangular; third segment slightly shorter than first, distinctly expanded at apex; remaining segments, including eleventh, gradually shorter, eighth to eleventh distinctly incised at base on mesial-surface in male, scarcely perceptibly so in female.

Genotype: *Docohammus incisus* Aurivillius, by original designation.

Remarks: The mesosternal tubercle will at once distinguish this genus from *Docohammus*. Further distinctions are to be found in the presence of only three tubercles on the pronotal disk, and the much shorter antennae, the apical segments of which, in the male, are distinctly incised.

Docolamia incisus Aurivillius

Docohammus incisus Aurivillius, Tijds. Ent. LIX, 1916, p. 220, pl. 8, fig. 8.

Docolamia incisus Aurivillius. Breuning, Nov. Ent. suppl. III (2), 1944, p. 390.

Male. Dark reddish brown to fuscous, rather densely covered with fulvous pubescence. Head above each side of middle with an indistinct, subdenuded vitta. Pronotum often with brighter fulvous pubescence on discal tubercles. Elytra largely

hoary pubescent, broadly, irregularly varied with fulvous, on side with a broad, triangular, fuscous plaga extending from humerus to slightly behind middle, its apex nearly attaining suture at the middle of the length; at apical fifth a short, broad, poorly defined, brownish plaga on sides. Body beneath and legs pale brownish fulvous pubescent, irregularly tinged with ashy; abdominal sternites broadly bright fulvous each side, with denser patches forming vague maculae. Antennae fulvous-ashy pubescent.

Head minutely alutaceous; front subquadrate, sides parallel, with a few fine scattered punctures; eye with lower lobe broadly oblong, not quite half again as tall as gena. Pronotum one-fourth again as wide across base as long, sides irregular, subparallel; lateral tubercles prominent, placed at middle, armed with a robust, obtuse tooth; apical and basal transverse sulci rather shallowly impressed, the former slightly recurved at middle, disk with three prominent tubercles, the anterior pair slightly more elevated, and with a small indistinct tubercle each side, basally with a number of fine granules. Elytra rather coarsely granulate-punctate on basal fourth, punctures thence coarse, subfoveate, becoming much finer behind middle to apex; basal gibbosity broad, feebly prominent, preceded at extreme base by a small group of more prominent granules; apices broadly, separately rounded or obliquely subtruncate. Antennae about one-third again as long as body, robust, subdepressed, beneath rather densely fimbriate to apex, scape sparsely so; scape sinuate, robust, gradually clavate to apex, feebly expanded at extreme tip, attaining apical third of pronotum; third segment slightly shorter than first, straight, somewhat thicker apically; remaining segments gradually shorter, including eleventh; eighth to eleventh segments deeply incised at base on mesial side.

Female. Antennae as long as body, sparsely fimbriate beneath to apex, apical segments not incised at base.

Length 18.5-21 mm.; width 6.7-7.8 mm.

Type locality: Banana, Congo.

Distribution: West and Central Africa.

Ivory Coast: 3; Dimbroko [EFG]

Remarks: The three specimens described above have near the apex of the elytra a brownish plaga which Aurivillius does not mention in his original description, based on a Congo specimen. It may prove that these Ivory Coast examples represent a distinct subspecies.